

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	121
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_RD0524_01_s _ 2012_121				
Comment Code					
Inspector Comment					
The RD has a digital copy of the O&M manual.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	123
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
DWR ID	DWR_RD0524_01_s _ 2012_123				
Comment Code					
Inspector Comment					
No recent training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.00	Rating **	M	Issue No.	138	
LM End	0.00	Issue Type +	Ma	Location *	N/A	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Emergency Supplies & Equipment				°	
					°	
DWR ID	DWR_RD0524_01_s_2013_138					
Comment Code						
Inspector Comment						
The LMA does not appear to have emergency supplies or equipment.						

No Photos

LM Start	0.19	Rating **	U	Issue No.	5
LM End	0.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.939085 °	37.939085 °
				-121.343917 °	-121.343917 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2016 Site ID:RD0524U01RM40.85]					

Photo 1 of 3 : SJR2016_RD0524U01RM40.85_1.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.19	Rating **	U	Issue No.	5 (cont)	
LM End	0.19	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.939085 °	37.939085 °	
				-121.343917 °	-121.343917 °	
DWR ID						
Comment Code						
Inspector Comment						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2016 Site ID:RD0524U01RM40.85]						

Photo 2 of 3 : SJR2016_RD0524U01RM40.85_3.jpg



Close view of the erosion.

LM Start	0.19	Rating **	U	Issue No.	5 (cont)
LM End	0.19	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SJR2016_RD0524U01RM40.85_4.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.21	Rating **	M	Issue No.	3
LM End	0.21	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.938890 °	37.938890 °
				-121.343657 °	-121.343657 °
DWR ID	DWR_RD0524_01_s_2016_3				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
No change in status.					

Photo 1 of 3 : FA_2016_RD0524_107_3_20160929_00007.jpg



Looking west at 3" depression on levee crown. (Spring 2012)

LM Start	0.21	Rating **	M	Issue No.	3 (cont)
LM End	0.21	Issue Type +	Ma	Location *	CR

Photo 2 of 3 : FA_2016_RD0524_107_3_20160929_00008.jpg



Looking west at depression on levee crown near waterward shoulder.

LM Start	0.21	Rating **	M	Issue No.	3 (cont)
LM End	0.21	Issue Type +	Ma	Location *	CR

Photo 3 of 3 : FA_2016_RD0524_107_3_20160929_00009.jpg



Looking east at 3" depression on levee crown. (Spring 2012)

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain


+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 3 of 4 : FA_2016_RD0524_107_179_20160929_00225.jpg




Looking west at untrimmed tree on waterward slope. (Spring 2015)

Photo 4 of 4 : FA_2016_RD0524_107_179_20160929_00226.jpg



Looking east at untrimmed tree on waterward slope. (Fall 2015)

Photo 1 of 4 : FA_2016_RD0524_107_174_20161013_00386.jpg



Looking southwest at several rodent holes on waterward slope. (Fall 2016)

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.30	Rating **	U	Issue No.	174 (cont)
LM End	0.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.938382 °	37.938382 °
				-121.342352 °	-121.342352 °
DWR ID	DWR_RD0524_01_f _ 2014_174				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes present at this site. No change at site during spring 2016 inspection.					

Photo 2 of 4 : FA_2016_RD0524_107_174_20160929_00219.jpg



Looking southeast at several rodent holes on waterward slope. (Spring 2016)

LM Start	0.30	Rating **	U	Issue No.	174 (cont)
LM End	0.30	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2016_RD0524_107_174_20160929_00218.jpg



Looking west at several rodent holes on waterward shoulder. (Spring 2015)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.30	Rating **	U	Issue No.	174 (cont)
LM End	0.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.938382 °	37.938382 °
				-121.342352 °	-121.342352 °
DWR ID	DWR_RD0524_01_f_2014_174				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes present at this site. No change at site during spring 2016 inspection.					

Photo 4 of 4 : FA_2016_RD0524_107_174_20160929_00217.jpg



Looking southeast at several rodent holes on waterward slope. (Fall 2015).

LM Start	0.34	Rating **	M	Issue No.	180
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938461°	37.938461°
				-121.341626°	-121.341626°
DWR ID	DWR_RD0524_01_s_2014_180				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion is located along the lower level of waterward slope.					

Photo 1 of 2 : FA_2016_RD0524_107_180_20160929_00227.jpg



Looking southeast at erosion on waterward toe.

LM Start	0.34	Rating **	M	Issue No.	180 (cont)
LM End	0.34	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2016_RD0524_107_180_20160929_00228.jpg



Looking northeast at erosion on waterward toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.40	Rating **	U	Issue No.	16
LM End	0.40	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.938870 °	37.938870 °
				-121.340460 °	-121.340460 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: More vegetation observed at the site.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation.					
[2016 Site ID:RD0524U01RM40.99]					

LM Start	0.40	Rating **	U	Issue No.	16 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD0524U01RM40.99_2.jpg



Front view of the site.

Photo 2 of 2 : SJR2016_RD0524U01RM40.99_4.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.40	Rating **	U	Issue No.	205
LM End	0.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938625 °	37.938695 °
				-121.340479 °	-121.339420 °
DWR ID	DWR_RD0524_01_s_2016_205				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Several damage site within this reach.					

Photo 1 of 2 : FA_2016_RD0524_107_205_20160929_00246.jpg



Looking at slope damage on landward slope.

LM Start	0.40	Rating **	U	Issue No.	205 (cont)
LM End	0.46	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD0524_107_205_20160929_00247.jpg



Looking at slope damage on landward slope.

LM Start	0.41	Rating **	U	Issue No.	170
LM End	0.45	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938628 °	37.938688 °
				-121.340385 °	-121.339627 °
DWR ID	DWR_RD0524_01_s_2015_170				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Several slope instabilities within this reach.					

Photo 1 of 3 : FA_2016_RD0524_107_170_20160929_00210.jpg



Looking at slope damage on waterward shoulder (Spring 2016)

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.41	Rating **	U	Issue No.	170 (cont)	
LM End	0.45	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.938628 °	37.938688 °	
				-121.340385 °	-121.339627 °	
DWR ID	DWR_RD0524_01_s_2015_170					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Several slope instabilities within this reach.						

Photo 2 of 3 : FA_2016_RD0524_107_170_20160929_00211.jpg



Looking at slope damage on waterward shoulder.

LM Start	0.41	Rating **	U	Issue No.	170 (cont)
LM End	0.45	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2016_RD0524_107_170_20160929_00212.jpg



Looking at waterward slope erosion.

LM Start	0.62	Rating **	U	Issue No.	11
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.938278°	37.938247°
				-121.336524°	-121.336503°
DWR ID	DWR_RD0524_01_s_2012_11				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Bamboo on waterward slope. Bamboo has been killed but still blocking view of waterward slope.					

Photo 1 of 5 : FA_2016_RD0524_107_11_20160929_00018.jpg



Looking at bamboo on waterward slope. (Spring 2016)

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.62	Rating **	U	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.938278 °	37.938247 °
				-121.336524 °	-121.336503 °
DWR ID	DWR_RD0524_01_s_2012_11				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Bamboo on waterward slope. Bamboo has been killed but still blocking view of waterward slope.					

LM Start	0.62	Rating **	U	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS

Photo 2 of 5 : FA_2016_RD0524_107_11_20160929_00019.jpg



Looking at bamboo on waterside slope. (Fall 2015)

Photo 3 of 5 : FA_2016_RD0524_107_11_20160929_00020.jpg



Looking at dying bamboo on waterward slope. (Spring 2013)

LM Start	0.62	Rating **	U	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS

Photo 4 of 5 : FA_2016_RD0524_107_11_20160929_00021.jpg



Looking at bamboo on waterside slope. (Spring 2012)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.62	Rating **	U	Issue No.	11 (cont)	
LM End	0.63	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.938278 °	37.938247 °	
				-121.336524 °	-121.336503 °	
DWR ID	DWR_RD0524_01_s_2012_11					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Bamboo on waterward slope. Bamboo has been killed but still blocking view of waterward slope.						

Photo 5 of 5 : FA_2016_RD0524_107_11_20160929_00022.jpg



Looking at bamboo on waterside slope. (Fall Inspection 2012)

LM Start	0.63	Rating **	U	Issue No.	10
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938247 °	37.938247 °
				-121.336503 °	-121.336503 °
DWR ID	DWR_RD0524_01_f_2015_10				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion located next to and under bamboo.					

Photo 1 of 3 : FA_2016_RD0524_107_10_20160929_00015.jpg



Looking east at waterside erosion appears to be caused by runoff.

LM Start	0.63	Rating **	U	Issue No.	10 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2016_RD0524_107_10_20160929_00016.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.63	Rating **	U	Issue No.	10 (cont)	
LM End	0.63	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.938247 °		37.938247 °
				-121.336503 °		-121.336503 °
DWR ID	DWR_RD0524_01_f_2015_10					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Erosion located next to and under bamboo.						

Photo 3 of 3 : FA_2016_RD0524_107_10_20160929_00017.jpg



Looking east at erosion under bamboo on waterward slope.

LM Start	0.64	Rating **	M	Issue No.	13
LM End	0.65	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938105 °	37.938023 °
				-121.336288 °	-121.336173 °
DWR ID	DWR_RD0524_01_s_2012_13				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Depression extend from shoulder to mid levee slope two site with this section.					

Photo 1 of 4 : FA_2016_RD0524_107_13_20160929_00024.jpg



Looking southeast at depression on waterward shoulder fall 2015

LM Start	0.64	Rating **	M	Issue No.	13 (cont)
LM End	0.65	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2016_RD0524_107_13_20160929_00025.jpg



Looking south at erosion on waterside shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.64	Rating **	M	Issue No.	13 (cont)	
LM End	0.65	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.938105 °		37.938023 °
				-121.336288 °		-121.336173 °
DWR ID	DWR_RD0524_01_s_2012_13					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Depression extend from shoulder to mid levee slope two site with this section.						

Photo 3 of 4 : FA_2016_RD0524_107_13_20160929_00026.jpg



View of the erosion.

LM Start	0.64	Rating **	M	Issue No.	13 (cont)
LM End	0.65	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2016_RD0524_107_13_20160929_00027.jpg



Update view of the erosion site.

LM Start	0.67	Rating **	U	Issue No.	14
LM End	0.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.937808 °	37.937808 °
				-121.335913 °	-121.335913 °
DWR ID	DWR_RD0524_01_s_2012_14				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Bamboo on waterward slope.Bamboo has been killed but still blocking view of levee slope.					

Photo 1 of 3 : FA_2016_RD0524_107_14_20160929_00028.jpg



Looking south at dying bamboo on waterward slope. Fall 2015

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.67	Rating **	U	Issue No.	14 (cont)	
LM End	0.67	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.937808 °		37.937808 °
				-121.335913 °		-121.335913 °
DWR ID	DWR_RD0524_01_s_2012_14					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Bamboo on waterward slope.Bamboo has been killed but still blocking view of levee slope.						

Photo 2 of 3 : FA_2016_RD0524_107_14_20160929_00029.jpg



Looking south at dying bamboo on waterward slope. (Spring 2013)

LM Start	0.67	Rating **	U	Issue No.	14 (cont)
LM End	0.67	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2016_RD0524_107_14_20160929_00030.jpg



Looking south at bamboo on waterside slope. (Fall 2012)

LM Start	0.71	Rating **	M	Issue No.	17
LM End	0.73	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.937222°	37.937222°
				-121.335277°	-121.335277°
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: The erosion site is immediately downstream of the RR bridge. [2016 Site ID:RD0524U01RM41.36]					

Photo 1 of 1 : SJR2016_RD0524U01RM41.36_3.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.76	Rating **	U	Issue No.	21
LM End	0.77	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.936821°	37.936821°
				-121.334582°	-121.334582°
DWR ID					

Comment Code

Inspector Comment

07/25/2016: No significant change observed.
 06/24/2015: No significant change observed.
 06/19/2014: No significant change observed.
 08/13/2013: No significant change at this site.
 08/07/2012: The site has been visited by boat survey. No significant change observed.
 08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion.
 [2016 Site ID:RD0524U01RM41.39]

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD0524U01RM41.39_1.jpg



Front view of the erosion site.

Photo 2 of 2 : SJR2016_RD0524U01RM41.39_4.jpg



Front view of the erosion.

*** Location**

LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.77	Rating **	U	Issue No.	262
LM End	0.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.936555 °	37.936555 °
				-121.334847 °	-121.334847 °
DWR ID	DWR_RD0524_01_s_2012_262				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation at landside toe along fence line.					

LM Start	0.77	Rating **	U	Issue No.	262 (cont)
LM End	0.77	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : FA_2016_RD0524_107_262_20160929_00264.jpg



Looking west at dense vegetation at landward slope and toe fall 2015.

Photo 2 of 3 : FA_2016_RD0524_107_262_20160929_00265.jpg



Looking west at dense vegetation on landside toe. Spring 2014

LM Start	0.77	Rating **	U	Issue No.	262 (cont)
LM End	0.77	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2016_RD0524_107_262_20160929_00266.jpg



Looking southwest at vegetation on landward slope and toe. (Spring 2013)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.	76
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.936444 °	37.936444 °
				-121.334797 °	-121.334797 °
DWR ID	DWR_RD0524_01_s_2012_76				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_76_20160929_00126.jpg



Looking southwest at low hanging tree branches at landside toe.

LM Start	0.81	Rating **	U	Issue No.	2
LM End	0.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.936093 °	37.936004 °
				-121.334648 °	-121.334615 °
DWR ID	DWR_RD0524_01_f_2013_2				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.					

Photo 1 of 6 : FA_2016_RD0524_107_2_20160929_00001.jpg



Looking west at large hole on landward shoulder (Spring 2016)

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS

Photo 2 of 6 : FA_2016_RD0524_107_2_20160929_00002.jpg



Looking southwest at hole on landward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.	2 (cont)	
LM End	0.81	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.936093°	37.936004°	
				-121.334648°	-121.334615°	
DWR ID	DWR_RD0524_01_f_2013_2					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.						

Photo 3 of 6 : FA_2016_RD0524_107_2_20160929_00003.jpg



Looking west at hole on landward shoulder.

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS

Photo 4 of 6 : FA_2016_RD0524_107_2_20160929_00004.jpg



Looking southeast at finger erosion on landward slope.

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS

Photo 5 of 6 : FA_2016_RD0524_107_2_20160929_00005.jpg



Looking east at erosion on landward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.	2 (cont)	
LM End	0.81	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.936093°	37.936004°	
				-121.334648°	-121.334615°	
DWR ID	DWR_RD0524_01_f_2013_2					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
One large hole. Hole is over 12" deep and 12" wide and several holes and finger erosions on landward slope.						

Photo 6 of 6 : FA_2016_RD0524_107_2_20160929_00006.jpg



Looking northeast at several finger erosion on landward slope.

LM Start	0.83	Rating **	U	Issue No.	22
LM End	0.84	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935930 °	37.935930 °
				-121.334133 °	-121.334133 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2016 Site ID:RD0524U01RM41.44]					

Photo 1 of 2 : SJR2016_RD0524U01RM41.44_2.jpg




Close view of the erosion site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 2 of 2 : SJR2016_RD0524U01RM41.5_2.jpg



Close view of the erosion.

Photo 1 of 1 : FA_2016_RD0524_107_77_20160929_00127.jpg



Looking south at low hanging tree branches at landside toe.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	0.96	Rating **	M	Issue No.	20
LM End	0.96	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935181°	37.935181°
				-121.332297°	-121.332297°
DWR ID	DWR_RD0524_01_f_2013_20				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					

No Photos

LM Start	1.00	Rating **	U	Issue No.	47
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935410 °	37.935410 °
				-121.331560 °	-121.331560 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion was discovered during the boat survey. [2016					
Site ID:RD0524U01RM41.58]					

Photo 1 of 2 : SJR2016_RD0524U01RM41.58_1.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.00	Rating **	U	Issue No.	47 (cont)
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935410 °	37.935410 °
				-121.331560 °	-121.331560 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion was discovered during the boat survey. [2016					
Site ID:RD0524U01RM41.58]					

Photo 2 of 2 : SJR2016_RD0524U01RM41.58_2.jpg



Close view of the erosion.

LM Start	1.02	Rating **	U	Issue No.	55
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935078 °	37.935078 °
				-121.331134 °	-121.331134 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed. 06/24/2015: No significant change observed. 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site. 08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away. [2016 Site ID:RD0524U01RM41.59]					

Photo 1 of 3 : SJR2016_RD0524U01RM41.59_1.jpg



Upstream view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	55 (cont)
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935078 °	37.935078 °
				-121.331134 °	-121.331134 °
DWR ID					

Comment Code

Inspector Comment

07/25/2016: No significant change observed.
 06/24/2015: No significant change observed.
 06/19/2014: No significant change observed.
 08/13/2013: No significant change at this site.
 08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.
 08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away.
 [2016 Site ID:RD0524U01RM41.59]

LM Start	1.02	Rating **	U	Issue No.	55 (cont)
LM End	1.02	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SJR2016_RD0524U01RM41.59_2.jpg



Close view of the erosion.

Photo 3 of 3 : SJR2016_RD0524U01RM41.59_4.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.08	Rating **	U	Issue No.	18 (cont)	
LM End	1.08	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.934645 °		37.934645 °
				-121.330310 °		-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Slope damage extend from shoulder to middle of slope.						

LM Start	1.08	Rating **	U	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS

Photo 4 of 7 : FA_2016_RD0524_107_18_20160929_00040.jpg



Updated picture of the erosion site on the landside shoulder. Fall 2014

Photo 5 of 7 : FA_2016_RD0524_107_18_20160929_00041.jpg



Looking south at caving on landside shoulder. (Spring 2013)

LM Start	1.08	Rating **	U	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS

Photo 6 of 7 : FA_2016_RD0524_107_18_20160929_00042.jpg



Looking at updated slope stability as of Fall 2013.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.08	Rating **	U	Issue No.	18 (cont)	
LM End	1.08	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.934645 °		37.934645 °
				-121.330310 °		-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Slope damage extend from shoulder to middle of slope.						

Photo 7 of 7 : FA_2016_RD0524_107_18_20160929_00043.jpg



Updated view from above the slope stability.

LM Start	1.12	Rating **	M	Issue No.	171
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.934225 °	37.933815 °
				-121.329693 °	-121.329242 °
DWR ID	DWR_RD0524_01_s_2015_171				
Comment Code					
PR : Prunings					
Inspector Comment					
Prunings left on waterward shoulder and slope.					

Photo 1 of 1 : FA_2016_RD0524_107_171_20160929_00213.jpg



Looking south at prunings on waterward shoulders.

LM Start	1.13	Rating **	C	Issue No.	175
LM End	1.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934171°	37.934171°
				-121.329584°	-121.329584°
DWR ID	DWR_RD0524_01_f_2014_175				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.13	Rating **	M	Issue No.	19
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934118 °	37.933775 °
				-121.329657 °	-121.329305 °
DWR ID	DWR_RD0524_01_s_2012_19				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_19_20160929_00044.jpg



Looking southeast at low hanging tree branches at waterside toe.

LM Start	1.15	Rating **	U	Issue No.	60
LM End	1.23	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.933347°	37.933347°
				-121.329110°	-121.329110°
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: No significant change observed on site.					
09/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank.					
9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.					
10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2016 Site ID:RD0524U01RM41.79]					

Photo 1 of 3 : SJR2016_RD0524U01RM41.79_2.jpg



Direct view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.	60 (cont)
LM End	1.23	Issue Type +	Ma	Location *	WS

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	N/A : Not Applicable A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.16	Rating **	U	Issue No.	915
LM End	1.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.933775 °	37.932784 °
				-121.329250 °	-121.328765 °
DWR ID	DWR_RD0524_01_s_2012_915				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Control veg at landward toe and berm.					

LM Start	1.16	Rating **	U	Issue No.	915 (cont)
LM End	1.23	Issue Type +	Ma	Location *	LS

Photo 1 of 4 : FA_2016_RD0524_107_915_20161013_00387.jpg



Looking southwest at dense veg at landward toe and berm. (Fall 2016)

Photo 2 of 4 : FA_2016_RD0524_107_915_20160929_00274.jpg



Looking northwest at dense veg at landward toe and berm. (Spring 2016)

LM Start	1.16	Rating **	U	Issue No.	915 (cont)
LM End	1.23	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : FA_2016_RD0524_107_915_20160929_00275.jpg



Looking southwest at dense veg at landward toe and berm. (Spring 2015)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.16	Rating **	U	Issue No.	915 (cont)	
LM End	1.23	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.933775 °		37.932784 °
				-121.329250 °		-121.328765 °
DWR ID	DWR_RD0524_01_s_2012_915					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Control veg at landward toe and berm.						

Photo 4 of 4 : FA_2016_RD0524_107_915_20160929_00276.jpg



Looking southwest at dense veg. on landside toe. (Fall 2015)

LM Start	1.17	Rating **	U	Issue No.	206
LM End	1.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.933591°	37.933591°
				-121.329154°	-121.329154°
DWR ID	DWR_RD0524_01_s_2016_206				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_206_20160929_00248.jpg



Looking southwest a untrimmed tree at landward toe. (Spring 2016)

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.29	Rating **	U	Issue No.	71
LM End	1.32	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931858 °
				-121.328300 °	-121.328300 °
DWR ID					

Comment Code

Inspector Comment

07/25/2016: No significant change observed.
 06/24/2015: No significant change observed.
 06/19/2014: No significant change observed.
 08/13/2013: New signs of animal activity were found.
 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM41.92]

LM Start	1.29	Rating **	U	Issue No.	71 (cont)
LM End	1.32	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016_RD0524U01RM41.92_2.jpg



Front view of the erosion.

Photo 2 of 3 : SJR2016_RD0524U01RM41.92_3.jpg



Front view of the erosion.

LM Start	1.29	Rating **	U	Issue No.	71 (cont)
LM End	1.32	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SJR2016_RD0524U01RM41.92_4.jpg



Front view of the erosion. Note the drainage pipe on the site.

*** Location**

LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.32	Rating **	M	Issue No.	130
LM End	1.36	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.931658°	37.931085°
				-121.328255°	-121.328112°
DWR ID	DWR_RD0524_01_s_2013_130				
Comment Code					
C3 : Add appropriate gravel or road base. Grade and compact.					
Inspector Comment					

No Photos

LM Start	1.36	Rating **	U	Issue No.	172
LM End	1.40	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.931085 °	37.930517 °
				-121.328112 °	-121.328072 °
DWR ID	DWR_RD0524_01_s_2015_172				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Levee crown depression several inches below original crown elevation. Section should be survey to determine proper elevation.					

Photo 1 of 2 : FA_2016_RD0524_107_172_20160929_00214.jpg



Looking east at depression on levee crown.

LM Start	1.36	Rating **	U	Issue No.	172 (cont)
LM End	1.40	Issue Type +	Ma	Location *	CR

Photo 2 of 2 : FA_2016_RD0524_107_172_20160929_00215.jpg



Looking southeast at depression on levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.	79
LM End	1.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.930575 °	37.930575 °
				-121.328090 °	-121.328090 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge.					
[2016 Site ID:RD0524U01RM42.03]					

LM Start	1.39	Rating **	U	Issue No.	79 (cont)
LM End	1.39	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016_RD0524U01RM42.03_2.jpg



Front view of the erosion.

Photo 2 of 3 : SJR2016_RD0524U01RM42.03_3.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Close view of the erosion.

Close view of the erosion. Note the vegetation at the site.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.45	Rating **	U	Issue No.	89 (cont)
LM End	1.47	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.929650 °	37.929650 °
				-121.328110 °	-121.328110 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The site is located approximately 400 ft. downstream SR 4					
Bridge. Dense vegetation is visible at the toe. [2016 Site					
ID:RD0524U01RM42.09]					

Photo 2 of 2 : SJR2016_RD0524U01RM42.09_4.jpg



Close view of the erosion.

LM Start	1.49	Rating **	U	Issue No.	916
LM End	1.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.929118 °	37.929118 °
				-121.328368 °	-121.328368 °
DWR ID	DWR_RD0524_01_s_2012_916				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Untrimmed trees and dense vegetation on landward toe.					

Photo 1 of 4 : FA_2016_RD0524_107_916_20160929_00277.jpg



Looking at dense trees on landward slope and toe fall 2015

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

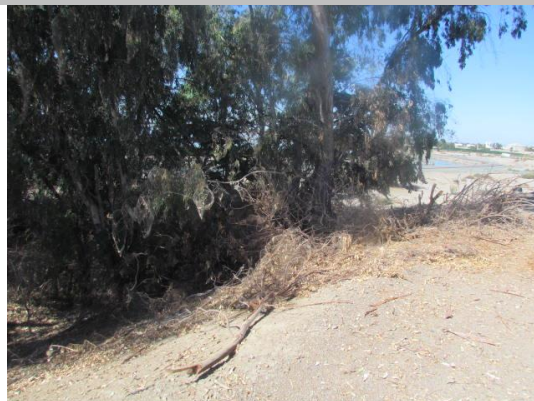
Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.49	Rating **	U	Issue No.	916 (cont)	
LM End	1.49	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Trim / Thin Trees			37.929118 °		37.929118 °
				-121.328368 °		-121.328368 °
DWR ID	DWR_RD0524_01_s_2012_916					
Comment Code						
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.						
Inspector Comment						
Untrimmed trees and dense vegetation on landward toe.						

Photo 2 of 4 : FA_2016_RD0524_107_916_20160929_00278.jpg



Looking at trees on landside slope. (Fall 2012)

LM Start	1.49	Rating **	U	Issue No.	916 (cont)
LM End	1.49	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : FA_2016_RD0524_107_916_20160929_00279.jpg



Looking at dense veg. on landside slope and toe.

LM Start	1.49	Rating **	U	Issue No.	916 (cont)
LM End	1.49	Issue Type +	Ma	Location *	LS

Photo 4 of 4 : FA_2016_RD0524_107_916_20160929_00280.jpg



Dense vegetation on landside toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.55	Rating **	U	Issue No.	23
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.928388 °	37.927797 °
				-121.328280 °	-121.327854 °
DWR ID	DWR_RD0524_01_s_2012_23				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation on landward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_23_20161013_00388.jpg



Looking southwest at dense veg on landward slope. (Fall 2016)

LM Start	1.55	Rating **	U	Issue No.	202
LM End	1.55	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.928372 °	37.928372 °
				-121.328283 °	-121.328283 °
DWR ID	DWR_RD0524_01_f_2016_202				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Large hole (looks like fences post or telephone pole) on waterward shoulder.					

Photo 1 of 2 : FA_2016_RD0524_107_202_20161013_00389.jpg



Looking at large hole (Fence/telephone post hole) on waterward shoulder.

LM Start	1.55	Rating **	U	Issue No.	202 (cont)
LM End	1.55	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2016_RD0524_107_202_20161013_00390.jpg



Looking at hole on waterward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.	90
LM End	1.62	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR Erosion Survey		37.927770°	37.927770°	
			-121.327870°	-121.327870°	
DWR ID					

Comment Code

Inspector Comment

07/25/2016: No significant change observed.
 06/24/2015: No significant change observed.
 06/19/2014: No significant change observed.
 08/13/2013: No significant change observed.
 08/07/2012: The site has been visited by boat survey. No significant change observed
 08/23/2011: No significant change observed on site. Trees concerned still in place.
 09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection.
 09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2016 Site ID:RD0524U01RM42.2]

LM Start	1.56	Rating **	U	Issue No.	90 (cont)
LM End	1.62	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016_RD0524U01RM42.2_1.jpg



Front view of the site where undermining has occurred.

Photo 2 of 3 : SJR2016_RD0524U01RM42.2_2.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 3 of 3 : SJR2016_RD0524U01RM42.2_4.jpg



Close view of the erosion at the levee toe.

Photo 1 of 1 : FA_2016_RD0524_107_173_20160929_00216.jpg




Looking northwest at tree on within levee crown.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 2 of 3 : FA_2016_RD0524_107_25_20161013_00393.jpg



Looking northwest at end of dense veg on waterward slope.

Photo 3 of 3 : FA_2016_RD0524_107_25_20161013_00391.jpg



Looking southwest at dense veg on waterward slope.

Photo 1 of 3 : FA_2016_RD0524_107_26_20160929_00059.jpg



Looking south at waterward erosion.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.62	Rating **	M	Issue No.	26 (cont)	
LM End	1.64	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.927507 °		37.927295 °
				-121.327593 °		-121.327298 °
DWR ID	DWR_RD0524_01_s_2012_26					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Several erosions along this reach.						

Photo 2 of 3 : FA_2016_RD0524_107_26_20160929_00060.jpg



Looking east at waterward erosion.

LM Start	1.62	Rating **	M	Issue No.	26 (cont)
LM End	1.64	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2016_RD0524_107_26_20160929_00061.jpg



Looking east at waterward erosion and depression.

LM Start	1.65	Rating **	N	Issue No.	8
LM End	1.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.927255°	37.926855°
				-121.327137°	-121.326672°
DWR ID	DWR_RD0524_01_s_2012_8				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Several tree stumps on waterside shoulder.					

No Photos

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.67	Rating **	U	Issue No.	45
LM End	1.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927018 °	37.927018 °
				-121.326872 °	-121.326872 °
DWR ID	DWR_RD0524_01_s_2012_45				
Comment Code					
ST : Stairway					
Inspector Comment					
Stairs and retaining wall					

LM Start	1.67	Rating **	U	Issue No.	45 (cont)
LM End	1.67	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2016_RD0524_107_45_20160929_00089.jpg



Looking northeast at non-permitted concrete stairs on waterside slope.

Photo 2 of 3 : FA_2016_RD0524_107_45_20160929_00090.jpg



Looking southwest at retaining wall connected to concrete stairs.

LM Start	1.67	Rating **	U	Issue No.	45 (cont)
LM End	1.67	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2016_RD0524_107_45_20160929_00091.jpg



Looking west at concrete stairs on waterside slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.69	Rating **	M	Issue No.	27
LM End	1.70	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.926728 °	37.926730 °
				-121.326597 °	-121.326508 °
DWR ID	DWR_RD0524_01_s_2012_27				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage several feet long and greater than one inch deep.					

Photo 1 of 1 : FA_2016_RD0524_107_27_20160929_00062.jpg



Looking south at landward slope depression.

LM Start	1.75	Rating **	U	Issue No.	46
LM End	1.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926152 °	37.925993 °
				-121.325927 °	-121.325777 °
DWR ID	DWR_RD0524_01_s_2012_46				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Downed tree limbs on landward slope.					

Photo 1 of 4 : FA_2016_RD0524_107_46_20160929_00092.jpg



Looking south at tree limbs on landward slope.

LM Start	1.75	Rating **	U	Issue No.	46 (cont)
LM End	1.76	Issue Type +	Ma	Location *	LS

Photo 2 of 4 : FA_2016_RD0524_107_46_20160929_00093.jpg



Looking southwest at tree limbs on landward slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.75	Rating **	U	Issue No.	46 (cont)	
LM End	1.76	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.926152°	37.925993°	
				-121.325927°	-121.325777°	
DWR ID	DWR_RD0524_01_s_2012_46					
Comment Code						
TR : Tree or limb						
Inspector Comment						
Downed tree limbs on landward slope.						

Photo 3 of 4 : FA_2016_RD0524_107_46_20160929_00094.jpg



Looking south at tree limbs on landward slope.

LM Start	1.75	Rating **	U	Issue No.	46 (cont)
LM End	1.76	Issue Type +	Ma	Location *	LS

Photo 4 of 4 : FA_2016_RD0524_107_46_20160929_00095.jpg



Looking southwest at dense vegetation and low hanging tree branches on landside slope and toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	1.94	Rating **	U	Issue No.	176
LM End	1.94	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.923688 °	37.923688 °
				-121.324223 °	-121.324223 °
DWR ID	DWR_RD0524_01_s_2015_176				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Landward caving (3 x 18" x 5) caused by broken sprinklers.					

Photo 1 of 2 : FA_2016_RD0524_107_176_20160929_00220.jpg



Looking west at erosion within landscaping on landward shoulder and slope.

LM Start	1.94	Rating **	U	Issue No.	176 (cont)
LM End	1.94	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD0524_107_176_20160929_00221.jpg



Looking east at erosion within landscaping on landward slope and shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Looking southeast at dense veg on waterward slope.

No Photos

No Photos

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.19	Rating **	U	Issue No.	91
LM End	2.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920992 °	37.920992 °
				-121.321370 °	-121.321370 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
07/22/2014: The erosion has increased in size.					
08/13/2013: No significant change observed. Slightly more vegetation was visible.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM42.79]					

LM Start	2.19	Rating **	U	Issue No.	91 (cont)
LM End	2.19	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD0524U01RM42.79_2.jpg



Close view of the pocket erosion.

Photo 2 of 2 : SJR2016_RD0524U01RM42.79_4.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.24	Rating **	U	Issue No.	99
LM End	2.27	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920650 °	37.920650 °
				-121.320370 °	-121.320370 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: An irrigation pipe is on site. [2016 Site					
ID:RD0524U01RM42.84]					

LM Start	2.24	Rating **	U	Issue No.	99 (cont)
LM End	2.27	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SJR2016_RD0524U01RM42.84_1.jpg



Close view of the erosion.

Photo 2 of 3 : SJR2016_RD0524U01RM42.84_3.jpg



Close view of the erosion.

LM Start	2.24	Rating **	U	Issue No.	99 (cont)
LM End	2.27	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SJR2016_RD0524U01RM42.84_4.jpg



Close view of the erosion. Note the irrigation pipe next to the erosion.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.25	Rating **	U	Issue No.	31
LM End	2.25	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.920493 °	37.920493 °
				-121.320565 °	-121.320565 °
DWR ID	DWR_RD0524_01_s_2012_31				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope instability probably cause by leak in irrigation pipe. Pipe should be inspected internally.					

Photo 1 of 3 : FA_2016_RD0524_107_31_20160929_00065.jpg



Looking south at siphon on waterward slope.

LM Start	2.25	Rating **	U	Issue No.	31 (cont)
LM End	2.25	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2016_RD0524_107_31_20160929_00066.jpg



Looking east at siphon on waterward slope.

LM Start	2.25	Rating **	U	Issue No.	31 (cont)
LM End	2.25	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2016_RD0524_107_31_20160929_00067.jpg



Looking south slope damage on waterward shoulder and slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Reclamation District No. 0524 Middle Roberts Island

Looking south at dense veg on landside slope and toe.

Looking west at pruning pile on waterward slope.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.31	Rating **	C	Issue No.	103
LM End	2.33	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.919885 °	37.919885 °
				-121.319710 °	-121.319710 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No sign of erosion observed at the repaired site.					
06/24/2015: No significant change observed.					
6/19/2014: The erosion was repaired.					
08/13/2013: The length of erosion has progressed downstream, and the site length has increased from 12 ft in length last year to 100 feet in length this year.					
08/07/2012: The site was first reported in the 2012 spring levee inspection report. The site is located at the inside corner of a river bend.					
[2016 Site ID:RD0524U01RM42.93]					

No Photos

LM Start	2.32	Rating **	M	Issue No.	34
LM End	2.33	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.919885 °	37.919703 °
				-121.319713 °	-121.319702 °
DWR ID	DWR_RD0524_01_s_2012_34				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Slope damage caused by walking traffic and using bank as a fishing platform.					

Photo 1 of 1 : FA_2016_RD0524_107_34_20160929_00072.jpg



Looking northeast at damage to the slope possibly caused by human activity.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

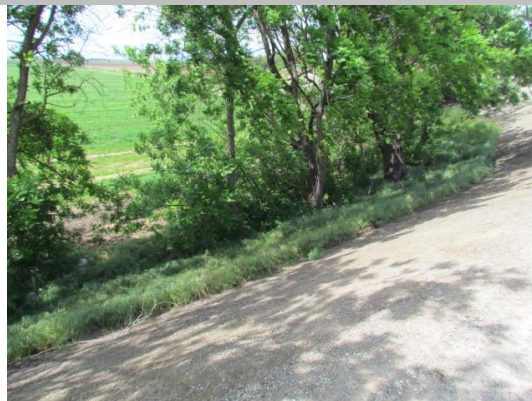
Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.33	Rating **	U	Issue No.	107
LM End	2.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919742°	37.919742°
				-121.319623°	-121.319623°
DWR ID	DWR_RD0524_01_s_2012_107				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_107_20160929_00168.jpg



Looking northwest at untrimmed trees at landward toe.

LM Start	2.38	Rating **	U	Issue No.	204
LM End	2.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.919067 °	37.918713 °
				-121.319935 °	-121.320595 °
DWR ID	DWR_RD0524_01_f_2016_204				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation on landward slope and waterward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_204_20161013_00398.jpg



Looking south at dense veg on landward slope.

LM Start	2.38	Rating **	M	Issue No.	184
LM End	2.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919036°	37.919036°
				-121.319969°	-121.319969°
DWR ID	DWR_RD0524_01_s_2014_184				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Reclamation District No. 0524 Middle Roberts Island

Looking east at erosion on waterside slope.

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Reclamation District No. 0524 Middle Roberts Island

Reclamation District No. 0524 Middle Roberts Island

Looking southwest at trees along levee landside toe.

Looking north at elderberry on waterside slope.

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Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 2 of 2 : FA_2016_RD0524_107_82_20160929_00136.jpg




Looking southwest at damaged landward slope. (Spring 2016)

Photo 1 of 3 : FA_2016_RD0524_107_218_20161013_00402.jpg



Looking east at trench on waterward shoulder.

Photo 2 of 3 : FA_2016_RD0524_107_218_20161013_00401.jpg



Looking south at trench on waterward shoulder.

Reclamation District No. 0524 Middle Roberts Island

Looking northwest at trench on waterward shoulder.

No Photos

Looking southwest at dense veg at landward toe.

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Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.65	Rating **	U	Issue No.	918
LM End	2.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916718 °	37.916502 °
				-121.322020 °	-121.321980 °
DWR ID	DWR_RD0524_01_s_2012_918				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landward slope and toe.					

Photo 1 of 1 : FA_2016_RD0524_107_918_20161013_00404.jpg



Looking south at untrimmed trees on landward slope.

LM Start	2.65	Rating **	C	Issue No.	122
LM End	2.65	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.916650 °	37.916650 °
				-121.321980 °	-121.321980 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No sign of erosion observed at the repaired site.					
06/24/2015: No significant change observed.					
06/19/2014: The erosion was repaired.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM43.23]					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.67	Rating **	M	Issue No.	44
LM End	2.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916418 °	37.915142 °
				-121.321963 °	-121.323018 °
DWR ID	DWR_RD0524_01_s_2012_44				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					
Trim over hanging trees at least 12 feet above ground level.					

Photo 1 of 1 : FA_2016_RD0524_107_44_20160929_00088.jpg



Looking north at dense trees overhanging levee crown.

LM Start	2.70	Rating **	U	Issue No.	264
LM End	2.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915968 °	37.915557 °
				-121.322275 °	-121.322607 °
DWR ID	DWR_RD0524_01_s_2012_264				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Untrimmed trees along landward slope and toe.					

Photo 1 of 1 : FA_2016_RD0524_107_264_20161013_00405.jpg



Looking south at untrimmed trees on landward slope.

LM Start	2.74	Rating **	C	Issue No.	70
LM End	2.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915503 °	37.915503 °
				-121.322745 °	-121.322745 °
DWR ID	DWR_RD0524_01_s_2012_70				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Broken tree branch removed.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Reclamation District No. 0524 Middle Roberts Island

Looking southwest at prunings on landside slope.

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.93	Rating **	U	Issue No.	51
LM End	2.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.913415°	37.913415°
				-121.324503°	-121.324503°
DWR ID	DWR_RD0524_01_s_2012_51				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landward slope and toe.					

LM Start	2.93	Rating **	U	Issue No.	51 (cont)
LM End	2.93	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA_2016_RD0524_107_51_20160929_00102.jpg



Looking south at dense trees on landward slope fall 2015

Photo 2 of 2 : FA_2016_RD0524_107_51_20160929_00103.jpg



Looking south at dense trees on landward slope spring 2015

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	2.96	Rating **	U	Issue No.	126
LM End	2.96	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.913010°	37.913010°
				-121.324490°	-121.324490°
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2016 Site ID:RD0524U01RM43.52]					

Photo 1 of 2 : SJR2016_RD0524U01RM43.52_1.jpg



Upstream view of the erosion.

LM Start	2.96	Rating **	U	Issue No.	126 (cont)
LM End	2.96	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SJR2016_RD0524U01RM43.52_4.jpg



Close view of the erosion. Note the vegetation at the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.02	Rating **	M	Issue No.	924
LM End	3.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.912163°	37.912163°
				-121.324702°	-121.324702°
DWR ID	DWR_RD0524_01_s_2012_924				
Comment Code					
A2 : Repair the levee slope damaged by livestock and prevent large animal access.					
Inspector Comment					

No Photos

LM Start	3.07	Rating **	M	Issue No.	925
LM End	3.27	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.911382 °	37.908602 °
				-121.324928 °	-121.325395 °
DWR ID	DWR_RD0524_01_s_2012_925				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes on levee slopes.					

Photo 1 of 2 : FA_2016_RD0524_107_925_20160929_00282.jpg



Looking at typical view of rodent hole with this section fall 2015.

LM Start	3.07	Rating **	M	Issue No.	925 (cont)
LM End	3.27	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD0524_107_925_20160929_00283.jpg



Looking at typical rodent holes on landward slope along this reach.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.23	Rating **	C	Issue No.	128
LM End	3.31	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908544 °	37.908544 °
				-121.324894 °	-121.324894 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: New erosion was found at the levee toe. Trees are present.					
08/07/2012: The site has been repaired. Protecting riprap revetment has been placed at the levee shoulder and slope, but minor erosions are visible at the levee toe.					
08/23/2011: Sloughing rip rap is visible on the site [2016 Site ID:RD0524U01RM43.83]					

No Photos

LM Start	3.27	Rating **	M	Issue No.	186
LM End	3.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908551 °	37.908551 °
				-121.325381 °	-121.325381 °
DWR ID	DWR_RD0524_01_s _ 2014_186				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

Photo 1 of 1 : SJR2016_RD0524U01RM43.86_3.jpg

Close view of the erosion. Note the river rocks and vegetation at the levee toe.

Photo 1 of 2 : FA_2016_RD0524_107_926_20160929_00284.jpg



Looking southwest at dense veg on landward slope.

Photo 2 of 2 : FA_2016_RD0524_107_926_20160929_00285.jpg



Looking at untrimmed trees on landward slope and toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	N/A : Not Applicable A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.36	Rating **	M	Issue No.	53
LM End	3.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.907283 °	37.906503 °
				-121.325432 °	-121.325002 °
DWR ID	DWR_RD0524_01_s _ 2012_53				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	3.42	Rating **	C	Issue No.	56
LM End	3.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.906540 °	37.906540 °
				-121.325015 °	-121.325015 °
DWR ID	DWR_RD0524_01_s _ 2012_56				
Comment Code					
MA : Material					
Inspector Comment					
Landowner removed broken concrete pipes from landward slope.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.65	Rating **	U	Issue No.	190
LM End	3.65	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.904070 °	37.904070 °
				-121.325118 °	-121.325118 °
DWR ID	DWR_RD0524_01_f_2015_190				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Large century plant at landward toe.					

Photo 1 of 1 : FA_2016_RD0524_107_190_20160929_00234.jpg



Looking southwest at century plant at landward toe fall 2015.

LM Start	3.75	Rating **	U	Issue No.	52
LM End	3.75	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902828 °	37.902828 °
				-121.326170 °	-121.326170 °
DWR ID	DWR_RD0524_01_s_2016_52				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_52_20160929_00104.jpg



Looking south at untrimmed tree on landward slope and toe.

LM Start	3.77	Rating **	U	Issue No.	927
LM End	3.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902645 °	37.902645 °
				-121.326340 °	-121.326340 °
DWR ID	DWR_RD0524_01_s_2012_927				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed almond tree on landward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_927_20160929_00286.jpg



Looking southwest at untrimmed tree at landward toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.78	Rating **	U	Issue No.	59
LM End	3.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902417 °	37.902417 °
				-121.326482 °	-121.326482 °
DWR ID	DWR_RD0524_01_s _ 2012_59				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_59_20160929_00110.jpg



Looking south at dense veg on landward slope and toe.

LM Start	3.80	Rating **	U	Issue No.	928
LM End	3.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902155 °	37.902002 °
				-121.326523 °	-121.326550 °
DWR ID	DWR_RD0524_01_s _ 2012_928				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Several trees on landward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_928_20160929_00287.jpg



Looking south at dense vegetation on landward slope and toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

No Photos

Looking southeast at cactus on waterside slope. Fall 2013

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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	3.89	Rating **	U	Issue No.	83
LM End	3.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.900854 °	37.900854 °
				-121.326438 °	-121.326438 °
DWR ID	DWR_RD0524_01_s _ 2012_83				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_83_20160929_00137.jpg



Looking south at untrimmed trees on landward slope and toe.

LM Start	4.03	Rating **	M	Issue No.	61
LM End	4.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.898925 °	37.898925 °
				-121.327015 °	-121.327015 °
DWR ID	DWR_RD0524_01_s _ 2012_61				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_61_20160929_00112.jpg



Looking east at untrimmed tree at landward toe.

LM Start	4.04	Rating **	C	Issue No.	64
LM End	4.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.898832 °	37.898090 °
				-121.327092 °	-121.327457 °
DWR ID	DWR_RD0524_01_s _ 2012_64				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.05	Rating **	C	Issue No.	62
LM End	4.05	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.898717 °	37.898717 °
				-121.327138 °	-121.327138 °
DWR ID	DWR_RD0524_01_f_2015_62				
Comment Code					
PR : Prunings					
Inspector Comment					
Pruning pile at landward toe.					

No Photos

LM Start	4.10	Rating **	U	Issue No.	108	
LM End	4.15	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.898035 °		°
				-121.327447 °		-121.327806 °
DWR ID	DWR_RD0524_01_s_2012_108					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Slope depression is greater than 1" and longer than 200'.						

Photo 1 of 3 : FA_2016_RD0524_107_108_20160929_00169.jpg



Looking north at caving slope on landside of levee.

LM Start	4.10	Rating **	U	Issue No.	108 (cont)
LM End	4.15	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2016_RD0524_107_108_20160929_00170.jpg



Looking south at damage slope on landside of levee.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

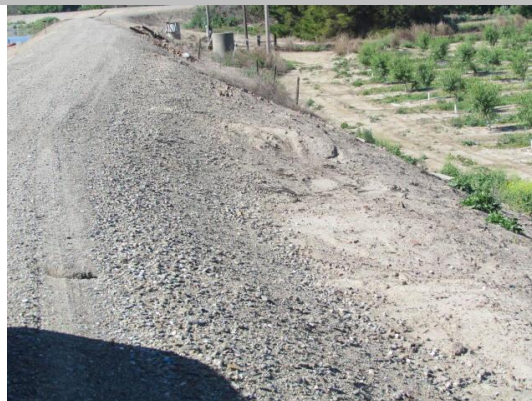
Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.10	Rating **	U	Issue No.	108 (cont)	
LM End	4.15	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.898035 °		°
				-121.327447 °		-121.327806 °
DWR ID	DWR_RD0524_01_s_2012_108					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Slope depression is greater than 1" and longer than 200'.						

Photo 3 of 3 : FA_2016_RD0524_107_108_20160929_00171.jpg



Looking southwest at caving slope on landside of levee. (Spring 2014)

LM Start	4.16	Rating **	M	Issue No.	213
LM End	4.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.897235 °	37.897235 °
				-121.327865 °	-121.327865 °
DWR ID	DWR_RD0524_01_s_2016_213				
Comment Code					
GA : Garbage					
Inspector Comment					
Old fence post and concrete and brick rubble on landward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_213_20160929_00257.jpg



Looking west at old fence post and concrete rubble on landward slope.

LM Start	4.36	Rating **	C	Issue No.	65
LM End	4.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894587 °	37.892493 °
				-121.329253 °	-121.328267 °
DWR ID	DWR_RD0524_01_s_2012_65				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain			

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.40	Rating **	U	Issue No.	112
LM End	4.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.893928 °	37.892230 °
				-121.329203 °	-121.328187 °
DWR ID	DWR_RD0524_01_s_2012_112				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees along landward slope and toe.					

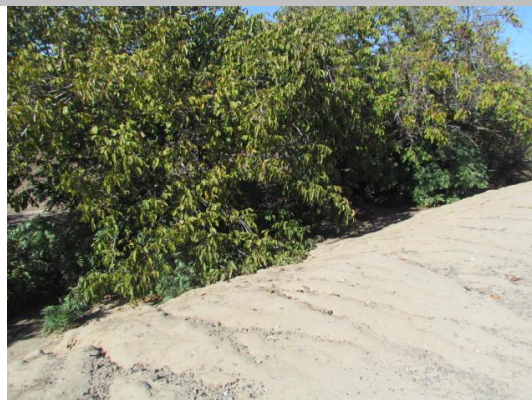
Photo 1 of 2 : FA_2016_RD0524_107_112_20160929_00174.jpg



Looking southeast at untrimmed tree at landward toe.

LM Start	4.40	Rating **	U	Issue No.	112 (cont)
LM End	4.53	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD0524_107_112_20160929_00175.jpg



Looking northeast at untrimmed tree on landward slope and toe fall 2015.

LM Start	4.43	Rating **	U	Issue No.	199
LM End	4.43	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.893582 °	37.893582 °
				-121.329108 °	-121.329108 °
DWR ID	DWR_RD0524_01_f_2015_199				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove dead tree from landward toe.					

Photo 1 of 1 : FA_2016_RD0524_107_199_20160929_00244.jpg



Looking west at dead tree on landward slope and toe fall 2015.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.53	Rating **	U	Issue No.	132
LM End	4.54	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.892230 °	37.892230 °
				-121.327930 °	-121.327930 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2016 Site ID:RD0524U01RM45.07]					

LM Start	4.53	Rating **	U	Issue No.	132 (cont)
LM End	4.54	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD0524U01RM45.07_3.jpg



Front view of the site. Note the loosely placed concrete blocks at the site.

Photo 2 of 2 : SJR2016_RD0524U01RM45.07_4.jpg



Upstream view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	4.71	Rating **	C	Issue No.	133
LM End	4.71	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.889809 °	37.889809 °
				-121.329342 °	-121.329342 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No sign of new erosion observed at the site.					
06/24/2015: No significant change observed.					
06/19/2014: The erosion was repaired.					
08/13/2013: No significant change observed.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: Cracking erosion along the levee bank. Erosion appears to be caused by river flows. [2016 Site ID:RD0524U01RM45.27]					

No Photos

LM Start	4.90	Rating **	U	Issue No.	84
LM End	4.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.887655 °	37.887277 °
				-121.331202 °	-121.331609 °
DWR ID	DWR_RD0524_01_s_2012_84				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_84_20161013_00412.jpg



Looking west at untrimmed tree on landward slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.22	Rating **	M	Issue No.	116
LM End	5.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.883170 °	37.883170 °
				-121.332227 °	-121.332227 °
DWR ID	DWR_RD0524_01_s_2012_116				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree limbs on waterside slope.					

No Photos

LM Start	5.28	Rating **	U	Issue No.	85
LM End	5.34	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.882377°	37.881498°
				-121.332598°	-121.332800°
DWR ID	DWR_RD0524_01_s_2012_85				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_85_20160929_00139.jpg



Looking south at untrimmed trees on landward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.38	Rating **	U	Issue No.	932
LM End	5.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880945°	37.880522°
				-121.332837°	-121.332918°
DWR ID	DWR_RD0524_01_s_2012_932				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_932_20160929_00290.jpg



Looking south at untrimmed trees on landward slope and toe.

LM Start	5.39	Rating **	M	Issue No.	178
LM End	5.39	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.880806 °	37.880806 °
				-121.332833 °	-121.332833 °
DWR ID	DWR_RD0524_01_f_2014_178				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Downed tree on landward toe.					

Photo 1 of 1 : FA_2016_RD0524_107_178_20160929_00223.jpg



Looking south at downed tree on landward slope.

LM Start	5.41	Rating **	C	Issue No.	931
LM End	5.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.880575 °	37.880575 °
				-121.332890 °	-121.332890 °
DWR ID	DWR_RD0524_01_s_2012_931				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
LMA grouted rodent holes.					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	118
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.880323°	37.880323°
				-121.332968°	-121.332968°
DWR ID	DWR_RD0524_01_s_2012_118				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage caused by human activity.					

Photo 1 of 3 : FA_2016_RD0524_107_118_20160929_00180.jpg



Looking west at slope damage on landside slope.

LM Start	5.42	Rating **	M	Issue No.	118 (cont)
LM End	5.42	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2016_RD0524_107_118_20160929_00181.jpg



Looking southeast at damaged slope.

LM Start	5.42	Rating **	M	Issue No.	118 (cont)
LM End	5.42	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2016_RD0524_107_118_20160929_00182.jpg



Looking east at slope caving on landside slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.43	Rating **	U	Issue No.	134
LM End	5.43	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.880320°	37.880320°
				-121.333266°	-121.333266°
DWR ID					

Comment Code

Inspector Comment

07/25/2016: No significant change observed.
 06/24/2015: No significant change observed.
 06/19/2014: No significant change observed.
 08/13/2013: The erosion seems to be getting worse. More material sloughing visible.
 08/07/2012: The erosion is underneath an irrigation pipe. The likely cause of the erosion is the pipe leakage. [2016 Site ID:RD0524U01RM45.97]

LM Start	5.43	Rating **	U	Issue No.	134 (cont)
LM End	5.43	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD0524U01RM45.97_1.jpg



Close view of the erosion and the pipe on the site.

Photo 2 of 2 : SJR2016_RD0524U01RM45.97_4.jpg



Front view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.44	Rating **	U	Issue No.	73
LM End	5.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880085 °	37.880085 °
				-121.333045 °	-121.333045 °
DWR ID	DWR_RD0524_01_s_2012_73				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landward slope.					

Photo 1 of 1 : FA_2016_RD0524_107_73_20161013_00414.jpg



Looking southwest at large untrimmed tree on landward slope.

LM Start	5.45	Rating **	M	Issue No.	189
LM End	5.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.879998 °	37.879998 °
				-121.333079 °	-121.333079 °
DWR ID	DWR_RD0524_01_s_2014_189				
Comment Code					
PR : Prunings					
Inspector Comment					
Prunings on landward shoulder should be removed.					

No Photos

LM Start	5.52	Rating **	C	Issue No.	96
LM End	5.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.878918 °	37.878918 °
				-121.333148 °	-121.333148 °
DWR ID	DWR_RD0524_01_s_2012_96				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.53	Rating **	M	Issue No.	135
LM End	5.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.878920 °	37.878920 °
				-121.332670 °	-121.332670 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
6/19/2014: No significant change observed.					
08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2016 Site ID:RD0524U01RM46.06]					

LM Start	5.53	Rating **	M	Issue No.	135 (cont)
LM End	5.53	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD0524U01RM46.06_3.jpg



Close view of the site. Note large trees at the levee shoulder.

Photo 2 of 2 : SJR2016_RD0524U01RM46.06_4.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.58	Rating **	U	Issue No.	214
LM End	5.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.878083°	37.878083°
				-121.332717°	-121.332717°
DWR ID	DWR_RD0524_01_s_2016_214				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Tall weeds, grasses and trees blocking view of landward toe.					

Photo 1 of 2 : FA_2016_RD0524_107_214_20160929_00258.jpg



LM Start	5.58	Rating **	U	Issue No.	214 (cont)
LM End	5.58	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD0524_107_214_20160929_00259.jpg



Looking west at dense veg at landward toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.64	Rating **	U	Issue No.	215 (cont)	
LM End	5.64	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.877378 °		37.877378 °
				-121.332343 °		-121.332343 °
DWR ID	DWR_RD0524_01_s_2016_215					
Comment Code						
S1 : Repair slope instability.						
Inspector Comment						
Levee slope damage is due vehicle traffic and foot traffic. Vehicle traffic created a ramp on landward slope.						

Photo 2 of 3 : FA_2016_RD0524_107_215_20160929_00261.jpg



Looking north at slope damage (ramp) on landward slope.

LM Start	5.64	Rating **	U	Issue No.	215 (cont)
LM End	5.64	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2016_RD0524_107_215_20160929_00262.jpg



Looking west at damage slope on landward slope.

LM Start	5.64	Rating **	U	Issue No.	69
LM End	5.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.877298°	37.875073°
				-121.332343°	-121.333168°
DWR ID	DWR_RD0524_01_s_2012_69				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
District has grouted rodent holes. But rodents have re-appeared.					

Photo 1 of 2 : FA_2016_RD0524_107_69_20160929_00117.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.64	Rating **	U	Issue No.	69 (cont)	
LM End	5.80	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Animal Control			37.877298 °	37.875073 °	
				-121.332343 °	-121.333168 °	
DWR ID	DWR_RD0524_01_s_2012_69					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
District has grouted rodent holes. But rodents have re-appeared.						

Photo 2 of 2 : FA_2016_RD0524_107_69_20160929_00118.jpg



Looking south at rodent holes on landward slope.

LM Start	5.64	Rating **	U	Issue No.	117
LM End	5.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.877272 °	37.877272 °
				-121.332400 °	-121.332400 °
DWR ID	DWR_RD0524_01_f_2013_117				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_117_20160929_00179.jpg



Looking northwest at untrimmed tree on landward slope.

LM Start	5.77	Rating **	M	Issue No.	196
LM End	5.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.875510 °	37.875510 °
				-121.332953 °	-121.332953 °
DWR ID	DWR_RD0524_01_s_2015_196				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landward slope and toe.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.79	Rating **	M	Issue No.	197
LM End	5.79	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.875310°	37.875310°
				-121.333065°	-121.333065°
DWR ID	DWR_RD0524_01_s_2015_197				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes on landward slope and levee crown.					

LM Start	5.79	Rating **	M	Issue No.	197 (cont)
LM End	5.79	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA_2016_RD0524_107_197_20160929_00239.jpg



Looking north at typical view of rodent holes on landward slope.

Photo 2 of 2 : FA_2016_RD0524_107_197_20160929_00240.jpg



Looking southwest at typical view of rodent hole at landward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.	139
LM End	5.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.874370 °	37.874370 °
				-121.332850 °	-121.332850 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2016 Site ID:RD0524U01RM46.39]					

LM Start	5.86	Rating **	U	Issue No.	139 (cont)
LM End	5.86	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD0524U01RM46.39_2.jpg



Close view of the erosion and the pipe on the site.

Photo 2 of 2 : SJR2016_RD0524U01RM46.39_4.jpg



Upstream view of the erosion and vegetation at the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

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Reclamation District No. 0524 Middle Roberts Island

Reclamation District No. 0524 Middle Roberts Island

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	N/A : Not Applicable A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	5.96	Rating **	U	Issue No.	120
LM End	5.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.873347°	37.873347°
				-121.332028°	-121.332028°
DWR ID	DWR_RD0524_01_s_2012_120				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD0524_107_120_20160929_00185.jpg



Looking south at untrimmed trees on landward slope and toe.

LM Start	6.00	Rating **	M	Issue No.	933
LM End	6.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873047 °	37.873047 °
				-121.331408 °	-121.331408 °
DWR ID	DWR_RD0524_01_s_2012_933				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Landowner cut steps into landside slope.					

Photo 1 of 1 : FA_2016_RD0524_107_933_20160929_00291.jpg



Looking north at steps cut into landward slope.

LM Start	6.02	Rating **	M	Issue No.	191
LM End	6.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.872844 °	37.872844 °
				-121.331070 °	-121.331070 °
DWR ID	DWR_RD0524_01_s_2014_191				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Cactus at landward toe.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.15	Rating **	U	Issue No.	81
LM End	6.15	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.871097°	37.871097°
				-121.330100°	-121.330100°
DWR ID	DWR_RD0524_01_s_2015_81				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Large tree fallen across levee crown blocking access. Fallen tree branches and limbs left on landward slope.					

LM Start	6.15	Rating **	U	Issue No.	81 (cont)
LM End	6.15	Issue Type +	Ma	Location *	LS

Photo 1 of 4 : FA_2016_RD0524_107_81_20160929_00132.jpg



Looking west at tree branches and limbs left on landward shoulder and slope. (Spring 2016)

Photo 2 of 4 : FA_2016_RD0524_107_81_20160929_00133.jpg



Looking south at tree branches and limbs left on landward shoulder and slope. (Spring 2016)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/10/2016 10/11/2016	Richard Willoughby

LM Start	6.17	Rating **	M	Issue No.	97							
LM End	6.17	Issue Type +	Ma	Location *	LS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Vegetation		37.870840°	37.870840°								
			-121.329993°	-121.329993°								
DWR ID	DWR_RD0524_01_s_2012_97											
Comment Code												
V2 : Remove the wild growth other than native grasses from the levee slopes.												
Inspector Comment												

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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